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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,218	02/17/2004	Mikio TSUTSUI	040029	2217
23850	7590	02/01/2006	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			GOFF II, JOHN L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,218

Applicant(s)

TSUTSUI, MIKIO

Examiner

John L. Goff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/23/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 8/29/02. It is noted, however, that applicant has not filed a certified copy of the 2002-241735 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 7/2, 8/7(2), and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Elmendorf (U.S. Patent 1,894,218).

Elmendorf discloses a method of forming a wood composite material comprising providing a paper backing (1 of Figure 1) including a layer of dry water-soluble (i.e. water-activated) adhesive (2 of Figure 1), placing the paper against the surface of a dry veneer (3 of Figure 1), and pressing the paper and veneer with a heating member (A and B of Figure 5) to soften the adhesive and laminate the paper and veneer (Figures 1 and 4 and Page 3, lines 27-33 and 40-61).

Regarding claim 1, the limitation “pressing... without moistening said water-activated adhesive layer and simultaneously heating said adhesive sheet” is seen to require heating the

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adhesive layer without applying (either before or during heating) any additional water thereto (See in particular paragraph 11 of the specification). Thus, this limitation does not exclude any moistening of the adhesive that may occur due to hygroscopic moisture within the veneer or adhesive itself, it being noted this interpretation is further consistent with dependent claim 7 wherein the veneer may have a moisture content up to 15%.

4. Claims 1, 2, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Works et al. (U.S. Patent 2,748,096).

Works et al. discloses a method of forming a wood composite material comprising providing a paper backing (11A of Figure 2) including a layer of dry water-soluble (i.e. water-activated) adhesive (11B of Figure 2), placing the paper against the surface of an object (10 of Figure 2), and pressing the paper and object with a heating member (Figure 4) to soften the adhesive and laminate the paper and object (Figures 2 and 4 and Column 3, lines 22-25 and Column 5, lines 74-75 and Column 5, lines 5-9 and Column 6, lines 1-26).

Regarding claim 1, the limitation “pressing... without moistening said water-activated adhesive layer and simultaneously heating said adhesive sheet” is seen to require heating the adhesive layer without applying (either before or during heating) any additional water thereto (See in particular paragraph 11 of the specification). Thus, this limitation does not exclude any moistening of the adhesive that may occur due to hygroscopic moisture within the object or adhesive itself, it being noted this interpretation is further consistent with dependent claim 7 wherein the object may have a moisture content up to 15%.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6, 7/3-6, 8/7(3-6), and 9/7(2-6) are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Elmendorf.

Elmendorf is described above in full detail.

Regarding claims 3-6, 7/3-6, and 8/7(3-6), Elmendorf disclose heat pressing the paper and veneer with a heating member at a temperature as low as 93 °C and as high as 138 °C for a length of time of a few seconds to five minutes under a pressure of 3.5 to 14 kg/cm² such that the claim limitations appear to be met (Page 2, lines 51-71 and Page 3, lines 49-60). In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the particular temperature, time, and pressure considering the disclosed ranges as a function of the peel strength of the laminated wood composite as doing so would have required nothing more than ordinary skill and routine experimentation.

Regarding claim 9(7/2-6), Elmendorf discloses the dry veneer may have no moisture content at all (Page 2, lines 79-88) or have a moisture content of 6 to 18% (Page 2 lines 119-122) such that the claim limitation appears to be met. In any event it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the particular moisture content considering the disclosed range as a function of the peel strength of

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the laminated wood composite as doing so would have required nothing more than ordinary skill and routine experimentation.

7. Claims 3-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Works et al.

Works et al. is described above in full detail. Works et al. disclose heat pressing the paper and object with a heating member at a temperature as low as 132 °C and as high as 288 °C for a length of time of about 20 seconds to about 7 minutes under a pressure of 0.35 to 14 kg/cm² such that the claim limitations appear to be met (Column 5, lines 18-42). In any event, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine the particular temperature, time, and pressure considering the disclosed ranges as a function of the peel strength of the laminated wood composite as doing so would have required nothing more than ordinary skill and routine experimentation.

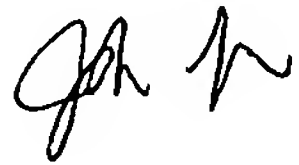
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff